

SPECIFICATION AMENDMENTS:

Please amend the paragraph appearing at page 10, lines 8-24 as follows:

In the second step of the catalyst preparation procedure, the aluminum modified Group III-B metal containing catalyst component made in the first step is mixed with a halogen containing compound. The halogen containing compound will be void of labile halogen atoms, such as labile bromine atoms, labile chlorine atoms, labile fluorine atoms, and labile iodine atoms. The halogen containing compound can be virtually any halogenated organic compound that does not contain labile halogen atoms, such as a primary alkyl halide or an aryl halide. Some representative examples of halogen containing compounds that can be used include chloroform, carbon tetrachloride, phenyl chloride, phenyl bromide, naphthyl chloride, naphthyl bromide, dibromomethane, dichloromethane, methylenedichloride, methylenedibromide, hexachloroethane, hexabromoethane, and the like.

Please amend the paragraph appearing at page 26, line 14 through page 27, line 4 as follows:

Comparative Example 15

In this example, a polyisoprene was prepared using a pre-alkylated Nd catalyst as described in Example 12 and the co-catalyst t-AmCl was added separately to the reactor containing isoprene monomer. The procedure described in Example 14 was utilized in this example except that a pre-alkylated Nd catalyst (as described in Example 12) was used as the co-catalyst catalyst and, 1.75 ml of a 1M solution of t-AmCl (in hexane) was subsequently added to the reactor containing isoprene premix in the reactor. The GC analysis of the residual monomer contained in the polymerization mixture indicated that 90 percent of isoprene was consumed after 350 minutes at 90°C. The polymerization was continued for an additional 30 minutes. The polymer was then recovered as described in Example 14. The resulting polymer had a glass transition temperature (Tg) at -67°C. It was also determined to have a Mooney viscosity (ML-4) at 100°C of 72. The GPC measurements indicated that the polymer has a number average molecular weight (Mn) of 476,000 and a weight average molecular weight (Mw) of 1,182,000. The polydispersity (Mw/Mn) of the resulting polymer was 2.48. A rate and polymer characteristics comparison of the polyisoprenes prepared using

Nd catalysts described in Examples 12 and 13 are tabulated in Table 1.

Please amend the paragraph appearing at page 28, lines 5-24 as follows:

Comparative Example 17

In this example, a 30/70 IBR was prepared using the procedure described in Example 15 Example 16 except that a premix containing a 30:70 mixture of isoprene and 1,3-butadiene was used as the monomers. The GC analysis of the residual monomer contained in the polymerization mixture indicated that 90% of isoprene was consumed after 276 minutes at 90°C. The polymerization was continued for an additional 30 minutes. The polymer was then recovered as described in Example 14. The resulting polymer had a Tg at -102°C. It was also determined to have a Mooney viscosity (ML-4) at 100°C of 103. The GPC measurements indicated that the polymer has a number average molecular weight (Mn) of 417,000 and a weight average molecular weight (Mw) of 1,021,000. The polydispersity (Mw/Mn) of the resulting polymer is 2.44. A rate and polymer characteristics comparison of the IBRs prepared using Nd catalysts described in Examples 12 and 13 are tabulated in Table 2.